03500.011365 PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
: Examiner: M. Brooke
NORIO OHKUMA, et al.)
: Group Art Unit: 2853
Application No.: 08/634,255)
:
Filed: April 18, 1996)
:
For: LIQUID JET RECORDING)
HEAD AND PROCESS FOR :
PRODUCTION THEREOF)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER TITLE 37 C.F.R. §1.132

I, Norio Ohkuma, declare that:
(Name of Declarant)

1. I reside at 3-18-1 shinkoji, Machida, Tokyo
(Street Address, City, Country)
Japan.

2. I have been a Research Scientist at Canon Kabushiki Kaisha since 1985. Prior to my employment at Canon I held the position of _____
(Year) (Title)

at _____ during the period _____. I have worked in the area(s)
(Company) (Years)

of Ink Jet Development.
(Expertise)

3. I have received an undergraduate degree in chemistry (Specialty)

from Waseda (Name) University in 1984 (Year),

a graduate degree from _____ (Name) University in

_____ (Year) and a doctoral degree in _____ (Specialty) from _____ (Name)

_____ University in _____ (Year).

4. I have received 28 (Number) patents in my name in the field

of Ink Jet and (list other honors, if applicable) _____

_____.

5. I am an inventor of the subject patent application and am familiar with the prosecution history of the subject patent application.

6. I conducted the following experiment (or had the following experiment conducted under my supervision and control):

Experiment

A resin composition was prepared using the same compounds as those of Experiment No. 4 of the subject Application No. 08/634,255, with the exception of the initiator. The compounds, and the percent by weight of each of the compounds, were as follows:

	Compound	Percent by weight
Epoxy compound	EHPE3150	78.7
Fluorocarbon compound	1,4 - HFAB	15.8
Initiator	SP170	1.6
Additive (Silane coupling agent)	A187	3.9
Total		100.00

The resin composition was dissolved in a solvent to form a solution. The solution was applied onto a silicon wafer to form a film with a thickness of about 20 μm, which was then cured by light and heat. The contact angle with regard to water was measured. The contact angle was 55 degrees.

The experiment was repeated, except that the fluorocarbon compound was omitted from the resin composition. The contact angle measured was 52 degrees.

7. As shown by the above contact angle measurements, the composition of the present invention exhibits hydrophilicity, even though the composition contains a fluorocarbon compound. In the applied reference U.S. Patent No. 5,166,265 (Nakahata),

the acceptable compositions are hydrophobic, having contact angles ranging from 81 to 94 degrees.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Subscribed this 22nd day of August, 2003
(Month - Year)

Mario Ohkuma
(Declarant's Name)

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